

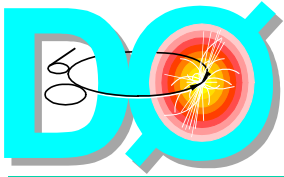
DØ Status and Operations

June 24 – July 1, 2002

- **Notable “features” of the last week**
 - ◆ Opened detector Friday to repair SMT water leak
 - ◆ Running multibuffer mode
 - ◆ Slightly updated trigger list, better diagnostics for Level 3 executable
 - ◆ Tuning trigger rates with colliding beam
 - ◆ SMT +5V South sequencer LVPS module replaced
 - ◆ All 198 AFE boards installed
 - ◆ Many minor jobs performed during access

Stores	Delivered Integrated Luminosity	Utilized Luminosity	Live Luminosity	Live fraction	Rate to tape	Events to tape
3	0.42 pb ⁻¹	0.27 pb ⁻¹	0.17 pb ⁻¹	63.0%	14.4 Hz	966 k



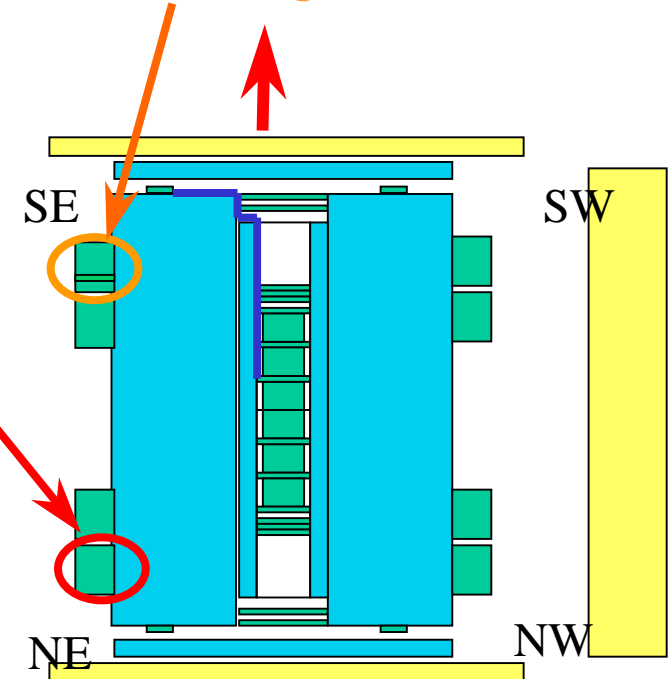


SMT Water Leak Repair

- Water discovered on platform on 06/17 and had one water drip detection
- Last Monday determined losing water from silicon East power supply cooling lines (0.5-1 gal/day)
- Access granted Friday 06/28
 - ◆ 06:00-09:00 Opened detector (CF south, EF east), installed access hardware
 - ◆ 11:00 Source of leak established to be heat exchanger for crate NE1. Boroscope investigation inconclusive.
 - ◆ Replacement would take 2-3 days
 - ◆ 14:00 Repairs and checkout complete. Start close up
 - ◆ 16:00 Closed
 - ◆ 16:30-19:30 Alignment Survey
 - ◆ 19:45 Search and Secure
 - ◆ 20:30 Access complete

- Both crates running air cooled, about 10°C warmer than others
 - hottest spot ~ 35°C

Heat Exchanger disabled 4/11

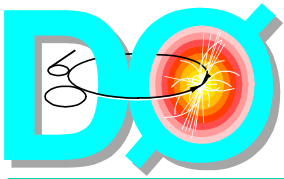


DØ Status



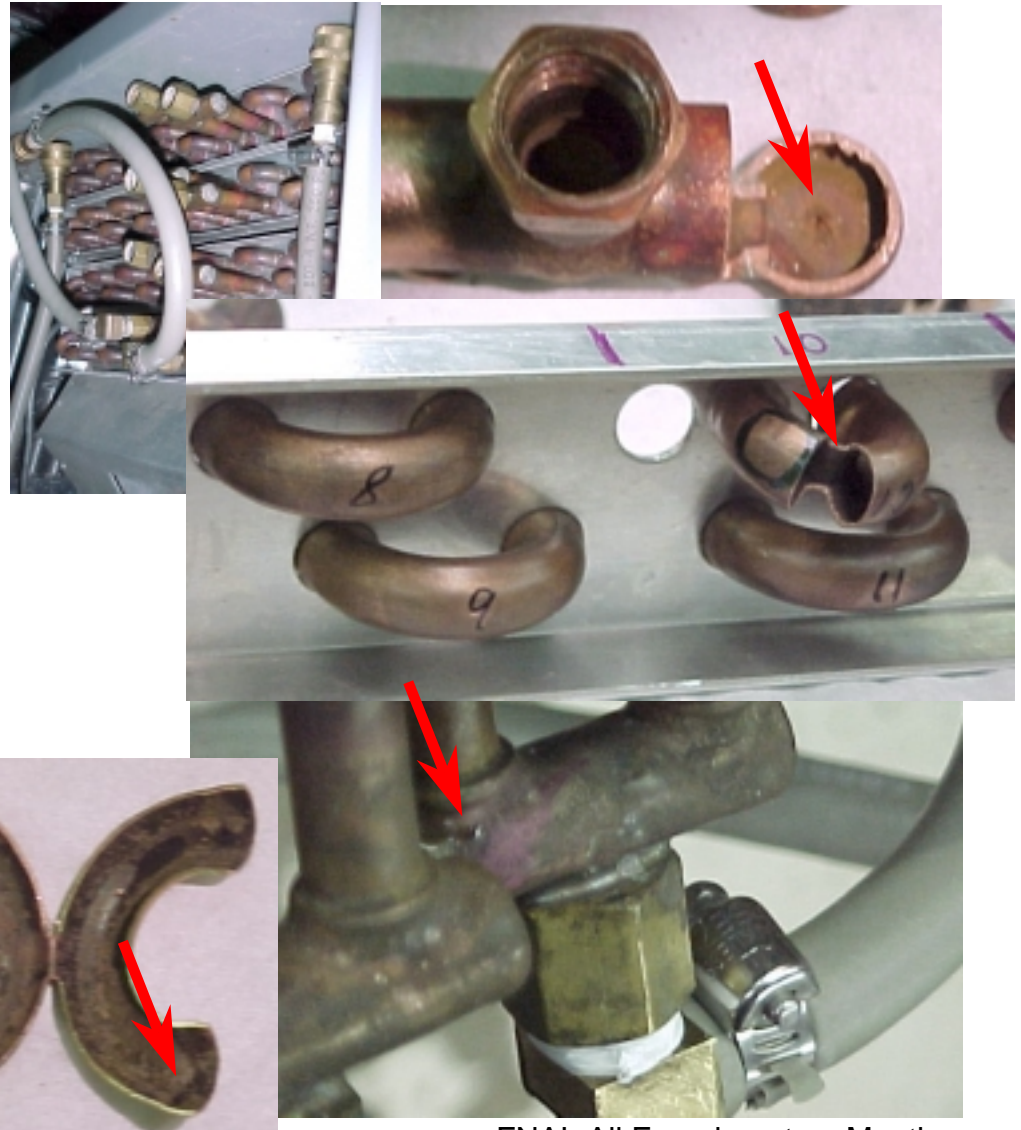
Leslie Groer
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FNAL All Experimenters Meeting
July 1, 2002



HX Leak Failure Analysis

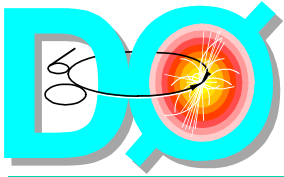
- Most common leak point in the end caps of the main supply or return tee
 - ♦ Indentation or dimple weak point
 - ♦ End caps soldered in Run 1 HXs
- Next most common Tee-solder branch
 - ♦ small crack-like leak develops at the side of the attachment tee (stressed?)
- Small rate of pin-hole leaks developing in the U-bend tubes
 - ♦ No significant signs of erosion seen (thickness about 15-19 mils). Believed to be sweat fitting that fails
- Using DCW
 - ♦ pH 7.8-8.0, chlorine < 0.5ppm, alkalines < 35 ppm
- Summary: slow gradual wear and tear. Can mitigate some of the risk before October if have access



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DAQ Status

- Progress on L1 CTT readout during accesses
- Online DAQ down few times during the week for firmware and controller upgrades
- Multibuffer mode running in all crates
- Tuned accept rates for
 - ◆ L1:~150-200 Hz, L2:~100 Hz, L3:30-45 Hz
- Some issues uncovered
 - ◆ L1/L2 decisions being sent on same tick occasionally
 - ▲ Firmware patch expected this week
 - ◆ Muon inputs to L2 missing occasionally
 - ▲ Operator intervention required every few minutes to reset/reconfigure readout crates
 - ▲ L2Muon software upgrades and diagnostics to automatically recognize and recover being developed
 - ▲ Improving robustness of Muon FE readout

